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A NEW SPECIES OF *DICERANDRA* (LAMIACEAE) FROM FLORIDA

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ABSTRACT

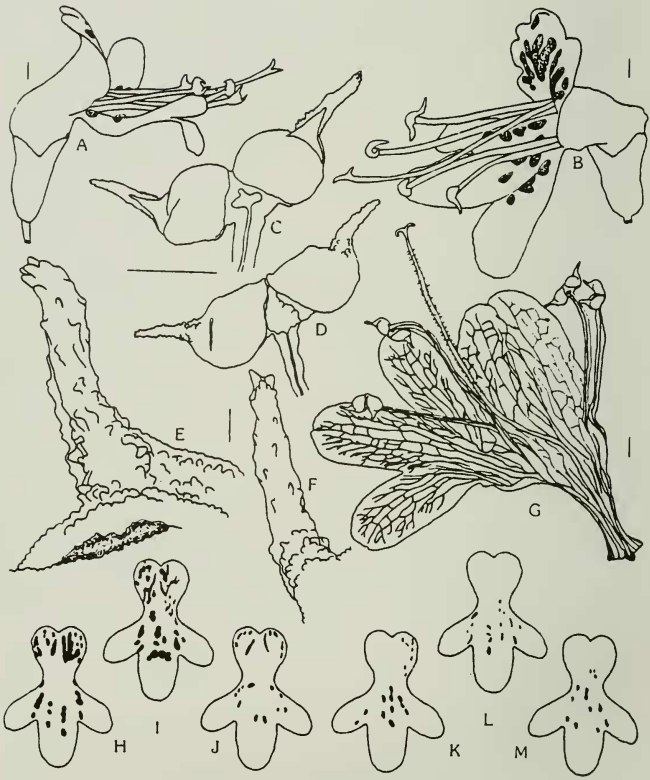
A new species of *Dicerandra*, **D. thinicola** H.A. Miller is described from Florida. It resembles *D. immaculata* but differs in having an abundantly maculate corolla, anther appendages shorter than the length of the theca, the horn of the appendage coarsely conic-tuberculate at the base and with scattered prorulate teeth distally.

KEY WORDS: Lamiaceae, *Dicerandra*, Florida

For several years graduate level classes in the plant biosystematics course at the University of Central Florida have been studying a nearby population of a suffrutescent *Dicerandra*. The plant is different from the only known woody Atlantic coastal species, *D. immaculata* Lakela, which lacks spots on the corolla (Wunderlin 1982). It differs from the Lake Wales ridge species, *D. frutescens* Shinners and *D. christmanii* Huck & Judd which are white with spots and the Ocala ridge species, *D. cornutissima* Huck, which has a glabrous to scarcely hairy style and horns which exceed the length of the anther sac. These and other characteristics combine to make it clear that the following species has remained undescribed:

Dicerandra thinicola H.A. Miller, *sp. nov.* Figure 1. Specimen typicum: UNITED STATES. Florida: Brevard County, at the end of Brandt Road, south of Columbia Avenue (SR 405), 5 November 1987, *Steven Reifler 1* (HOLOTYPE: MU; Isotypes: USF,FTU).

Plantae perennis, suffruticosa, usque ad 0.7 m alta sed saepe brevior. Rami ascendentes, angulosi apicem versus, foliis oppositis,



Dicerandra thinicola H. A. Miller. A, B. Flowers; C, D. Anthers; E, F. Anther appendages outside the stomium; G. Corolla split to show insertion of stamens and shape of the style; H-M. Diagrams of some spot patterns as seen front view of the corolla. Scale bars: A, B, C, D, G = 1mm; E, F = 0.1 mm.

linearibus, patentibus et aromaticis, marginibus integris. Verticillastri nunc multiflori axillares vel nunc omnes pauciflori. Flores in cyma, pedicelli brevibus, ca. 3 mm longis. Calyx cylindraceus, erectus, ore obliquo bilabiato, labio postico bidentato, labio antico integro et longitudinaliter bialato, intus glaber praeter circulo pilorum erectorum infra ore. Corolla bilabiata tubo basi geniculato (plerumque 60-75°), coloribus subroseis vel purpureis et maculis semper atropurpureis, labio postico trilobato, labio antico emarginato. Stamina exserta et tubo corollae supra basin sed infra medium inserta; filamenta graciles, antherarum thecae glabrae, divaricatae cum uterque theca in cornu attenuatum, theca e basi cornus dehiscens. Pistillum ovario 4-lobato in gynophoro orculiformi inserto, stylo gracili pili patentibus conspicuis, stigma terminate breve bilobum.

Subshrub 0.4-0.9 m high with ascending branches originating from a short trunk up to ca. 15 cm high, each spreading primary branch again branching near the base with nearly erect leafy branches, all of about equal length. Leaves opposite, oblong-linear, entire, acute, glabrous but glandular dotted on both surfaces, 14 (10-19) mm long × 1.3 (1.0-2.1) mm wide. When flowering is initiated shortly after the autumnal equinox, the oldest leafy branches begin to elongate distally to form an herbaceous verticillaster. When the inflorescence matures, new vegetative branches form in the middle of the plant even before the sexual cycle is completed on the fructiferous branches which die back once the fruits are mature. The verticillaster is comprised of 12 (5-16) floriferous nodes with an internodal distance of 15 (9-26) mm, bracts mostly 0.8-1.3 mm. The peduncle at the base of each 3-5(-7) flowered dichasium is 1.2 (0.9-1.7) mm long, pedicel 3 (1.5-4.2) mm long and scabrous. Calyx urceolate, bilabiate, weakly winged above, mostly smooth with a few short, stiff, antrorse hairs on the ribs, free margins ciliate, the inner calyx surface with a band of stiff antrorse hairs about 2/3 above the base and 6.5 (6-8) mm long × 2 mm wide. Corolla bilabiate, the erect standard erect with a shallow distal notch and variously splotched with dark pigments in the general orientation of nectar guides; the lower lip distinctly 3-parted with irregular rows of dots or streaks oriented towards the tube; corolla tube 5 (4.5-6.5) mm long up to the geniculum above which the infundibulum is 9.5 (9-12) mm at its greatest length on the lower lip, neck of the corolla tube lined with glandular hairs. Corolla colors: background; white (2.5 RP9.5/1), purplish white (2.5RP9.5/1, 4.9P8.7/1.4), very pale purple (7.5P8/4), light purple (5.4P7.3/6, 7.5P7/6), brilliant purple (7.5P3/6, 7.5P6.2/12.3), vivid purple (5RP4/12), vivid reddish purple 2.5RP5/13), deep reddish purple (2RP2.3/10.3), strong reddish purple (2.5RP5/13, 10P512), pale purplish pink (10P8.6/2) moderate purplish pink (2.5RP7/6), deep purplish pink (10P6/10); splotches; moder-

ate red (2.5R4/10), moderate reddish purple (10P4/6, 10P4/8), vivid reddish purple (4.7P4.7/15), deep reddish purple (2RP2.3/10.3), very dark purple (8.1P1.6/6), strong purplish red (5RP4/12). Stamens four, exserted, each filament arising from the base of the infundibulum and terminating in a malleolate connective separating the anther sacs; each anther sac dehiscing by a slit and bearing a slender horn shaped appendage 0.9 (0.6-1.3) mm long, the basal cells of the appendage each erect conic tuberculate, the distal cells elongate and smooth or sometimes prorate forming low teeth, and with an erose appendage tip. Anther colors: light purple (5.4P7.3/6.4, 8.75P6/7), moderate purple (7.5P5/6), dark purple (7.5P3/6), vivid purple (4.9P5/14.1, 6.2P4.7/16/3), moderate red (2.5R5/8), deep violet (9.6PB2.2/8), grayish purple (7.5P4/4), moderate purplish pink (2.5RP7/6), strong purplish pink (2.5RP7/10), deep purplish pink (10P6/10), and a range from light through strong reddish purple (10P6/9, 2.5RP6/8, 2.5RP4/6, 10P3/6, 10P3/8, 10P5/12). Pistil with slender style hispid from the geniculum to 1 mm below the stigma, 20 (18-28) mm long stigma bipartite; ovary 4-segmented, inserted on a barrel-shaped gynophore ca. 0.5 mm long × 0.5 mm in diameter.

Additional specimens examined: UNITED STATES. Florida: Brevard County: east side of U.S. 1 A little south of Volusia County line across from church. 28 October 1988, *Johnson, A.N.* (USF); Brevard County along E side of street 0.5 mi S of Cheney Road, ca. 1.5 mi S of Indian River City, ca. 4 mi S of Titusville, sand pine scrub on low hills, 17 November 1987, *Hansen et al. 11700* (U,FMU).

The species name, "dune dweller," for the dune scrub balm reflects the habitat of disturbed, open areas on old dunes of yellow sand.

Color names are based on the ISCC-NBS system (Kelly & Judd 1976) and the color matches were taken with the Munsell Color Cascade and the Munsell Book of Color (1976) with notations based on that system. Only representative notations are given to demonstrate the variations in the population.

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